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Cotton Fiber and Processing Test Results

CROP of

1977



Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38122 October 21, 1977

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1977

Discussion of Test Results

Short staple cottons tested from the Southwestern Area through October 14 this season are slightly longer and more uniform than a year ago, according to the Cotton Division, Agricultural Marketing Service, USDA. Samples tested are finer and considerably stronger than a year earlier. Shirley Analyzer nonlint content is higher, but picker and card waste is lower. Yarns spun from these samples are stronger but have slightly lower appearance grades. The average spinning potential yarn number is higher.

Medium staple samples tested from the South Central Area are slightly longer than a year ago at this time. Cottons tested to date are coarser. The Shirley Analyzer nonlint content is higher. Yarns spun from these samples are weaker and have lower appearance grades. Yarn imperfections are higher than a year ago.

Medium staple samples tested from the Southwest show cotton fibers to be slightly shorter but more uniform than last year. Fiber strength is higher at zero gage strength tests. Picker and card waste is lower than a year ago. Yarns spun from these samples show lower appearance grades. The average spinning potential is higher than a year ago.

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These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.^{1/} These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

1/ Summary of Cotton Fiber and Processing Test Results, Crop of 1976,
USDA, AMS, Cotton Division, June 1977.

Table 1.--Cotton:

Averages of fiber and processing tests from selected gin points in the United States through October 14, 1977

Staple group Area, and Crop year	Lots tested	Fiber test results						Processing test results						
		Fibrograph 2.5% span		Mike fine- ness 50/2.5 unif.		Fiber strength Zero gage 1/8" gage		S A nonlint waste		P & C waste	Skein str.	Yarn quality Appear- ance	Imperf- ections	Spin. Potent.
		No.	Inches	Pet.	Rdg.	Mpsi	G/tex	Pet.	Pet.	Lbs.	Index	No.	Yarn No.	
Short Staple: Southwest														
1976	3	.96	44	4.4	83	20	2.8	7.1	83	113	12	36		
1977	19	.97	45	4.0	91	21	3.4	5.4	98	111	12	43		
Medium Staple: Southeast														
1976	-	-	-	-	-	-	-	-	-	-	-	-		
1977	7	1.06	47	4.8	88	23	3.4	5.8	101	97	23	49		
South Central														
1976	3	1.10	46	4.3	88	22	2.9	5.9	112	107	15	59		
1977	47	1.11	46	4.6	87	23	3.6	5.9	108	97	23	58		
Southwest														
1976	22	1.07	45	4.2	81	22	3.1	6.0	105	99	19	52		
1977	30	1.06	46	4.2	84	22	3.2	5.4	106	93	17	59		
West														
1976	-	-	-	-	-	-	-	-	-	-	-	-		
1977	1	1.10	46	4.8	86	24	2.6	6.2	102	90	29	58		
Significant dif- ference 2/ 2/														
		0.02	2	0.2	2	1	0.5	0.5	4 (22s)	5	2	3		

1/ Based on a limited number of samples of modal quality
Minimum differences considered to be significant for comparisons in this table.

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1977

Production Area, Classification		Fiber Test Results						Processing Test Results - Carded Yarns						
Sample Number	Grade	Digital Fibrograph	Mike	Fiber Strength	Elongat'n 1/8"	S.A.	Color	Raw Stock	P & C	Strength	Elongation	Appearance Index	Impfect's	Spin. Potential
No	Name & Code	Stple span	2.5%	Unif	Zero 1/8"	Gage	Gra	Non-lint	Yel	8s or 22s	8s or 22s	8s or 22s	8s or 22s	8s or 22s
		32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	Ibs	Ibs	Pct	Pct	No
SOUTHWEST AREA														
CENTRAL TEXAS														
BARLOWELL 2 MID LT SP	31	0.98	4.7	4.4	91	20	5.7	2.7	2	4	4.8	279	98 PERCENT	
BRANDON 3 MID LT SP	30	0.94	4.6	4.3	89	22	5.4	2.7	2	4	5.4	281	96 PERCENT	
ITASCA 2 MID	31	.98	45	4.4	94	22	5.8	3.5	2	4	5.2	297	93 PERCENT	
PALMER 2 SLM LT SP	31	0.96	46	4.4	93	20	5.5	3.8	3	4	6.2	276	100 PERCENT	
NORTHWEST TEXAS														
PETERSBURG 1 MID	32	0.98	46	4.6	90	21	5.1	2.1	1	4	4.8	306	99 PERCENT	

1/ Cotton stuck to processing rolls

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977--(continued)

Production Area, Classification & Sample Number	Fiber Test Results										Processing Test Results - Carded Yarns										
	Digital Fibrograph		Fiber Strength		S.A. Non- Lint		Color Raw Stock		P & C Waste		Strength		Elongation		Appearance Index		Imperfect's		Spin Potential		
	No.	Grade	Staple	2.5% span	Unif.	Mike	Zero Gage	1/8"	Gage	G/tex	Pct	Pct	No.	Pct	Lbs	Lbs	Pct	Pct	No.	No.	
SOUTH CENTRAL AREA--(Continued)																					
MISSISSIPPI BELZONI 1 SLM	41	35	1.14	46	4.3	83	22	5.0	3.8	2	2	5.1	113	38	6.7	4.4	100	80	16	13	68
BRANDON 1 SLM LT SP	42	34	1.10	45	4.9	80	21	5.4	3.2	3	3	6.3	89	27	5.6	4.2	100	70	18	15	49
COMO 1 SLM	41	34	1.09	46	4.5	84	21	5.1	4.0	2	3	6.0	104	34	6.0	4.3	100	70	22	20	54
INDIANOLA 2 LM	51	36	1.13	48	4.9	89	24	5.3	5.9	2	2	7.0	112	38	6.1	4.7	100	80	18	15	63
INDIANOLA 2 LM	51	35	1.11	46	5.0	91	23	5.7	5.1	3	2	8.0	100	31	5.1	3.9	100	70	19	13	55
SCOTT 1 SLM	41	34	1.09	44	4.3	92	24	5.3	3.1	2	2	5.3	108	35	5.7	4.1	100	70	19	14	57
TRIBBETT 1 SLM	41	35	1.11	47	5.0	89	23	5.7	3.3	2	3	6.4	108	36	5.4	3.8	110	90	14	11	55
TRIBBETT 2 LM	51	35	1.13	45	4.3	95	21	5.7	3.9	3	2	6.6	104	35	5.0	3.7	100	80	21	16	59
WATER VALLEY 1 SLM LT SP	42	34	1.08	45	4.5	87	21	5.5	2.7	3	4	6.0	101	34	5.9	4.7	90	70	23	15	52
MISSOURI HAYTI 1 SLM	41	35	1.10	47	5.3	88	22	5.3	3.2	2	3	6.3	105	32	5.1	4.4	120	90	27	18	56
PARMA 1 LM	51	35	1.10	46	4.7	81	22	5.8	6.4	3	3	8.8	101	33	6.0	4.2	90	70	45	34	52
SENATH 2 LM LT SP	52	34	1.07	45	3.9	79	21	5.4	5.3	4	4	8.0	93	28	5.8	4.3	90	70	46	34	52
SENATH 2 SLM LT SP	42	35	1.14	46	4.4	81	23	5.5	3.8	3	3	6.2	106	35	6.7	4.9	80	70	33	21	59

Table 3 -Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977--(continued)

Production Area, Classification		Fiber Test Results										Processing Test Results - Carded Yarns									
Sample Number	Grade & Name & Code	Digital Fibrograph		Fiber Strength		S.A.		Color Raw Stock		Elongation		Appearance Index		Imperfect's		Spin. Potential					
		No.	Span	2.5% Unif.	Mike	Zero Gage	1/8"	Non- Lint	Gra Yel	P & C Waste	22s or 27 tx	50s or 27 tx	22s or 27 tx	50s or 12 tx	22s or 27 tx	50s or 12 tx					
SOUTH CENTRAL AREA--(Continued)		32S	In	Pct	Rdg	Mps <i>i</i>	G/tex	Pct	No	Pct	Lbs	Pct	Pct	No	No	No	No				
TENNESSEE																					
RIDGELEY	1 SLM	41	35	1.08	47	5.0	86	23	6.1	2.9	3	4	5.7	98	30	5.8	3.9				
ROSEMARK	1 SLM	41	34	1.06	46	4.3	91	23	5.8	3.0	2	3	5.6	107	34	5.8	4.2				
SOUTHWEST	AREA																				
SOUTH TEXAS																					
GANADO	3 SLM LT SP	42	33	1.05	47	4.6	85	22	5.7	3.9	2	3	6.2	103	34	6.0	4.4				
SINTON	4 MID	31	33	1.06	44	3.3	81	21	6.1	2.6	0	3	5.8	106	33	6.5	4.4				
CENTRAL TEXAS	GRANDVIEW	31	31	0.98	43	4.0	92	20	5.9	3.2	1	4	6.2	86	28	5.1	3.7				
WEST	AREA																				
CALIFORNIA	RIPLEY	31	34	1.10	46	4.8	86	24	5.5	2.6	1	3	6.2	102	34	5.5	4.1				

Table 4 --Cotton, American upland long staple: Quality characteristics by production areas, crop of 1977

Production Area, Classification & Sample Number		Fiber Test Results										Processing Test Results - Carded Yarns									
No	Grade	Digital Fibrograph	2.5% span	Unif. span	Mike Zero Gage	1/8" Gage	S.A. Non- Lint	Color Raw Stock	P & C and Comber Waste	Strength	Elongation	Appearance Index	Imprfct's 22s or 27 tx	Imprfct's 50s or 27 tx	Imprfct's 22s or 12 tx	Spin. Potential					
	Name & Code																				
<u>32s</u>																					
<u>In</u>																					
<u>Pct</u>																					
<u>Rdg</u>																					
<u>Mpsi</u>																					
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